# **Solar and Energy Efficiency Study Session City of San Jose**

# Overview of City Efforts

January 25, 2007





#### The purpose of the Study Session is to:

- Provide information on City efforts related to energy efficiency improvements and solar/renewables in city facilities.
- Hear from State of California and PG&E representatives on new opportunities to improve efficiency, use solar and reduce greenhouse gas emissions.
- Hear from municipal and private sector representatives of their efforts to save energy.
- Overview of Clean Technology as an emerging industry cluster.
- Obtain guidance from Council on the 2007-08 Sustainable Energy Action Plan.





### Supportive City Policies

- Sustainable City Policy—General Plan
- Green Building Policies
- Environmentally Preferable Procurement Policy
- United Nations Environmental Accords
- Sustainable Energy Policies





# Overall Reductions in City Facilities since 2001

- Over \$20M in estimated avoided electricity expenditures
- 20% reduction compared to established baseline (2001)
- 196M kWh reduced
- 124,000 metric tons of CO<sup>2</sup> reduced





### Highlights of Success

- New City Hall is 25% more energy efficient per square foot as compared to the previous City Hall
- Piloting new energy efficient technologies across city facilities—lighting, heating systems, fuel cells
- Traffic signals converted to LED—avoided electricity expenditures of \$1.67M
- Cool roof technologies
- City Building Energy Projects Fund established
- Partnerships with PG&E
- Collaboration with Sustainable Silicon Valley





## Key Considerations

- Ensuring sufficient resources for energy efficiency projects
- Third Party financing and the Use of Energy Service Companies for Energy Efficiency and Solar projects





#### **Policy Coordination**

Work with the Transportation and Environment Committee to ensure energy policies and actions are coordinated with overall City Policies and Direction

Present the proposed 2007-08 Sustainable Energy
Policy Report and Action Plan





#### Sustainable Energy Policies Implementation

Build upon the current energy successes and ensure continued implementation of the City's Sustainable Energy Policy Goals

Work with the City's Interdepartmental Energy Team to establish appropriate energy action plans for FY2007-08





#### Sustainable Energy Policies Implementation

- Goal I: Lead by example in pursuing the most efficient use of energy in City facilities and activities
- Goal II: Explore opportunities to improve energy reliability, supply and price stability to meet current and future energy needs
- Goal III: Promote collaboration on energy issues
- Goal IV: Promote and achieve a cleaner and healthier environment, including improving air quality and reducing greenhouse gas emissions
- Goal V: Encourage the development and use of renewable energy sources and alternative fuels





#### Sustainable Energy Policies Implementation

Establish an interdepartmental team to work on key financial issues associated with solar and energy efficiency installations and funding.

- Establish process whereby all general fund energy rebates are returned to the City's Building Energy Fund
- Continue exploring Energy Service Companies (ESCOs) and other funding sources available through PG&E and the State to achieve energy savings and pursue solar opportunities
- Ensure staff resources to audit city facilities and identify financial resources to implement energy projects



